

WHAT IS CLAIMED IS:

1. A method for avoiding interference in a wireless telecommunication system, comprising:

5 providing communication between a first and second component at an initial frequency;

determining a plurality of successive line quality indicators at a line quality monitor of the first component;

10 summing consecutive line quality indicators over a predetermined time to determine a slow hop count;

determining whether the slow hop count is greater than a slow hop threshold;

15 determining whether to provide communication with the first component at a second frequency when the slow hop count is greater than the slow hop threshold, the determination based on a power level of the second component and a communication strength received from the second component at the first component; and

20 communicating a signal from the first component to the second component requesting the second component to provide communication at the second frequency.

25 2. The method of Claim 1, the first component comprising a mobile unit and the second component comprising a base unit.

30 3. The method of Claim 1, the first component comprising a base unit and the second component comprising a mobile unit.

4. The method of Claim 1, further comprising providing communication with the first component at the second frequency when a specified number of consecutive line quality indicators is greater than a fast hop threshold.

5. The method of Claim 4, the first component comprising a mobile unit and the second component comprising a base unit.

6. The method of Claim 4, the first component comprising a base unit and the second component comprising a mobile unit.

7. A system for avoiding interference in a wireless telecommunication system, comprising:

a first component;

a second component for providing wireless communication with the first component at an initial frequency;

a line quality monitor for the first component, the line quality monitor for determining a plurality of successive line quality indicators;

a slow hop counter for summing consecutive line quality indicators over a predetermined time to determine a slow hop count and for determining whether the slow hop count is greater than a slow hop threshold;

an error detector for determining whether to provide communication with the first component at a second frequency when the slow hop count is greater than the slow hop threshold, the determination based on a power level of the second component and a communication strength received from the second component at the first component; and

the first component operable to communicate a signal to the second component requesting the second component to provide communication at the second frequency.

8. The system of Claim 7, the first component comprising a mobile unit and the second component comprising a base unit.

9. The system of Claim 7, the first component comprising a base unit and the second component comprising a mobile unit.

10. The system of Claim 7, further comprising:

a fast hop counter for monitoring a number of consecutive line quality indicators greater than a fast hop threshold to determine a fast hop count; and

the error detector also for providing communication with the first component at the second frequency when the fast hop count is greater than a fast hop value.

11. The system of Claim 10, the first component comprising a mobile unit and the second component comprising a base unit.

12. The system of Claim 10, the first component comprising a base unit and the second component comprising a mobile unit.

09334430-001604

Sub
a2
13. A method for conserving power in a wireless communication system, comprising:

providing communication between a first and second component;

5 transmitting an initial signal from the first component to the second component at a first power level;

receiving the initial signal from the first component at the second component;

03234415-001604
10 determining a communication strength for the initial signal at the second component; and

15 transmitting from the second component to the first component a request for the first component to transmit a subsequent signal at a second power level, the second power level based on the communication strength for the initial signal.

20 14. The method of Claim 13, the communication strength greater than a desired range and the second power level less than the first power level.

15 15. The method of Claim 13, the communication strength less than a desired limit and the second power level greater than the first power level.

25 16. The method of Claim 13, the first component comprising a mobile unit and the second component comprising a base unit.

30 17. The method of Claim 13, the first component comprising a base unit and the second component comprising a mobile unit.

add
a3
Add E1